DRAFT This version: August 11, 2022



CORE-GP 1018 Microeconomics Fall 2022

Instructor Information

- Professors:
 - o Professor Sewin Chan, sewin.chan@nyu.edu
 - o Professor Erica Dixon, ericahdixon@nyu.edu
 - o Professor Ingrid Gould Ellen, ingrid.ellen@nyu.edu
- Teaching Assistants:
 - o Kate Hausdorff, kh1692@nyu.edu
 - o Rebecca Kellogg, rh1203@nyu.edu
 - o Katherine Key, katherine.key@nyu.edu
 - Matt Looney, mjl443@nyu.edu (Head TA)
 - o Katherine Sam, katherine.sam@nyu.edu
 - Sarah Strochak, sarah.strochak@nyu.edu
- Course Administrator:
 - o Harry Boadu, hb1024@nyu.edu

Lecture Schedule:

- Section 01: Wednesday 10:00 -11:40am, GCASL 383, Ingrid Gould Ellen
- Section 02: Wednesday 2:00-3:40, GCASL 279, Sewin Chan
- Section 03: Wednesday 4:55-6:35pm, online, Erica Dixon
- Section 04: Wednesday 4:55-6:35pm, Silver 520, Sewin Chan
- Section 05: Wednesday 6:45-8:25pm, online, Erica Dixon

Recitation Schedule:

- Section 06: Monday 5:00-6:00pm, online, Matt Looney
- Section 07: Monday, 9:00-10:00pm, online, Katherine Sam
- Section 08, Tuesday 12:30-1:30pm, **online**, Katherine Key
- Section 09: Tuesday 5:30-6:30pm, **Kimmel 808**, Sarah Strochak
- Section 10: Tuesday 9:00-10:00pm, online, Rebecca Kellogg
- Section 11: Thursday 8:15-9:15am, online, Kate Hausdorff

Each week of the course runs on a **Wednesday to Tuesday** schedule. Recitations begin on Thursday 8 September.

Tutoring Schedule:

- The tutoring schedule is posted on the course website.
- All tutoring is online and begin after the first week's lectures on September 7th.

Course Description and Objectives

Students completing the course should gain the following knowledge and skills:

- 1. The ability to articulate tradeoffs in terms of opportunity cost, for individuals and for organizations.
- 2. An understanding of comparative advantage and the gains from trade.
- 3. The ability to employ marginal analysis in all types of decision making.
- 4. An understanding of how economic agents (consumers, organizations, workers, etc.) behave and respond to incentives, and how those decisions collectively affect aggregate outcomes.
- 5. An understanding of how markets work, and the ability to analyze the impact of economic events on market and organizational outcomes.
- 6. The ability to recognize the strengths and weaknesses of markets as a way to organize economic activity, and when market failures are likely to arise. An understanding of how public policy can improve market outcomes.
- 7. The ability to analyze and compare the efficiency and equity implications of alternative policy interventions.

The exams and assignments assess all of the above learning objectives.

Math Review

If you are at all unsure of your basic math, algebra and graphing skills, you should either work through this set of materials before the start of the semester: Math Review (https://wagner.nyu.edu/portal/students/academics/advisement/quantitative) or, attend the Wagner Math Review course (NONCR-GP 0906). The next section is:

Section 02 Fridays, 4:55-6:35pm for 5 weeks, 16 September – 14 October

You will need a clear and intuitive grasp of these math and graphing concepts to successfully complete this course. These concepts will not be reviewed in class.

Books

- 1. The required book for the course is McGraw-Hill's **Microeconomics** (**3rd edition**) by Dean Karlan and Jonathan Morduch. Available from the NYU Book Store. The textbook is also available in Course Reserves at Bobst.
- 2. Additional readings will be available on the course website.

Course Website on NYU Brightspace

The site can be accessed from the Academics tab in NYU Home or directly here: NYU Brightspace (https://brightspace.nyu.edu/d2l/home). If you have not activated your account or have forgotten your password, go to Start NYU (http://start.nyu.edu). All announcements and course related documents will be posted on the Brightspace course site. Some announcements will also be distributed via e-mail. Thus, it is important that you actively use your NYU e-mail account, or have appropriate forwarding set up. Materials on the course site can be accessed by selecting Content from the row of links at the top of the course homepage, and then using the tabs in the left-hand navigation bar. Materials are organized by class; within each class's tab, the content is sorted into pre-class activities, lecture, post-class activities, and assignments.

Course Requirements

Readings and Review Question/Problems (pre-class)

Readings should be done prior to the class for which they are listed. The assigned review questions and problems from the textbook should be completed as part of doing the textbook reading. You do not need to hand these in, but we will assume you have done them. The answers to these problems are posted in the pre-class activities section of each class's tab, however, do **not** consult answers before trying the problems on your own.

Pre-recorded lecture content (pre-class)

You should watch the pre-recorded portion of each lecture (about 15 minutes). The synchronous lecture assumes you have watched the video and attempted any problems/questions it poses; that will be the starting point of class each week.

News Analysis and Discussion (pre-class):

For many of the classes, your instructor will assign a specific reading or podcast for discussion along with a set of discussion questions. You should apply economic reasoning to the issues raised in these readings and **jot down your answers to the associated questions** before coming to class. Your answers to these questions will form the basis of in-class discussion.

Participation (pre-, during, and post-class):

Participation in class is required. Live attendance at lecture is expected, with videos on for online sessions (reach out to instructor for any issues). Each online lecture will also be recorded, and the recording will be available on the course site.

Mini quizzes (pre-class) and assignments (post-class), 10% of grade: Brief online multiple choice mini-quizzes on the reading material and pre-class video will be administered through the course site, and will close one hour before your scheduled lecture. You should plan to log in and take the quiz well before the site closes; you cannot be excused from taking a quiz due to last minute connectivity problems. Mini-quizzes provide a rapid assessment of your grasp of pre-lecture material, and will be graded pass/fail. In tallying your score on the mini-quizzes, you are permitted to miss/drop one quiz, without penalty.

The eleven written assignments should be completed after the lecture covering that material. They are due one hour before your next lecture. Assignments are reviewed in the weekly recitations. Late assignments will not receive any credit. All assignments are completed online via **Gradescope**. Many assignments ask you to add notation to graphs and tables, and then upload images of your work. JPEG or PDF format is required. You may annotate PDFs directly using a tablet + stylus or print and annotate hard copies and then use your phone to scan or photograph them. A search for "free mobile scanning apps" will yield many suggestions.

These assignments are intended to provide timely feedback on your understanding of key concepts post-lecture and before exams. They are graded pass (check plus/check/check minus) or fail to promote learning. In Grades in Brightspace, your homework score is represented as follows: 4 = check plus, 3 = check, 2 = check minus, and 1 = incomplete.

Practice problems (post-class):

The class tabs often include practice problems that you can complete after class for extra practice. Answers are posted, as well as videos with a walk-though on solving the problems. You should complete the practice problem on your own before looking at the answers.

Additional study materials (post-class):

The recitation handouts (see below) include additional practice problems. Additional videos relating to the lecture topics are available for some classes in the post-class section of each class's tab.

Exams, 90% of grade:

- 40% of grade: Online midterm exam. No make-ups.
- 50% of grade: Online, cumulative final exam. No make-ups.
- If you have a conflict with the exam dates, you should not take this course.
- All exams are two hours long and administered online.

Recitations and Tutoring

Recitations:

Recitations will not cover new material. They review material from the previous class primarily by going over problems that are posted in the post-class activities section of each class tab. Assignments will be reviewed in recitation and **not** during lecture. While attendance is not mandatory, you will need to master the content of these recitations to successfully complete the course. The average student will find it useful to attend, and we strongly encourage you to do so at least until the midterm exam.

Tutoring hours:

We have scheduled tutoring office hours to provide **one-on-one tutoring**. This tutoring is not a substitute for the recitations, but an additional resource for questions best addressed one-one.

Online Lectures, Recitations and Tutoring

Links to online lectures, recitations and tutoring are in "Course Zoom Links" on the left-hand side of the Content section of the course site. To join a live class session, ensure that you are logged into nyu.zoom.us and then click the link for the scheduled class meeting. Be sure to login 5-10 minutes prior to the start of class to leave time for troubleshooting and to say hello to your classmates before class begins. Once you are on Zoom, pick your desired screen/participant view, and troubleshoot if audio or video doesn't automatically turn on. Please make sure that your participant name is your full name [First Last]. For more information, see the NYU Zoom Guide for Students.

Students have 24/7 support to NYU's IT services. Explore the NYU servicelink knowledgebase for troubleshooting and student guides for all NYU-supported tools (like NYU Brightspace, Zoom, etc). Contact askIT@nyu.edu or 1-212-998-3333 for 24/7 technology assistance, or Zoom's 24/7 technical support and resources.

Statement of Academic Integrity

Academic integrity is a vital component of Wagner and NYU. All students enrolled in this class are required to read and abide by <u>Wagner's Academic Code</u>. All Wagner students have already read and signed the <u>Wagner Academic Oath</u>. Plagiarism of any form will not be tolerated and students in this class are expected to report violations to their professor. If any student in this class is unsure about what is expected of you and how to abide by the academic code, you should consult with your professor.

For this particular course, there are some specific behaviors required to meet our standards of academic integrity:

Assignments:

While we strongly encourage all students to work in groups, the final write-up of assignments must be done individually with no sharing of written answers.

Exams:

All exams must be the sole work of the individual student. Students may not consult or share information with anyone (other than their professor) during the exams.

Violations of these standards may result in all participating students failing the course and being remanded to the discipline committee for further action.

Henry and Lucy Moses Center for Students with Disabilities at NYU

Academic accommodations are available for students with disabilities. Please visit the <u>Moses Center for Students with Disabilities (CSD) website</u> and click on the Remote Accommodations or call or email CSD at (212-998-4980 or <u>mosescsd@nyu.edu</u>) for information. Students who are requesting academic accommodations are strongly advised to reach out to the Moses Center as early as possible in the semester for assistance.

NYU's Calendar Policy on Religious Holidays

NYU's Calendar Policy on Religious Holidays states that members of any religious group may, without penalty, absent themselves from classes when required in compliance with their religious obligations. Please notify your professor in advance of religious holidays that might coincide with exams to schedule mutually acceptable alternatives.

Detailed Course Outline

See the course website for details of:

- Reading and review questions/problems (complete before class)
- Pre-class video (complete before class)
- News analysis/discussion questions and mini quizzes (complete before class)
- · Practice problems and post-class videos (optional, post class)

Class 1: Introduction to microeconomics and why it matters for public service

An introduction to microeconomics and its core principles; main methods and tools of economics (models, variables, graphs, equations). The production possibility frontier as an illustration of scarcity, choice and opportunity cost; comparative advantage and gains from trade.

Lecture:

7 September

Recitations:

8 - 13 September

Assignment (complete after class, due by one hour before the start of next class):

Class 1 Assignment

Class 2: Demand and supply basics: price determination

Fundamental model of competitive markets, demand and supply curves; market determination of price and market equilibrium.

Lectures:

14 September

- Class 1 Assignment due one hour before class
- Class 2 Mini quiz due one hour before class

Recitations:

15 - 20 September

Assignment (complete after class, due by one hour before the start of next class):

Class 2 Assignment

Class 3: Elasticity, consumer and producer surplus, and price interventions

The shape of demand and supply curves; the importance of elasticity and its measurement. Measuring gains from trade using surplus. Price ceilings and floors.

Lectures:

21 September

- Class 2 Assignment due one hour before class
- Class 3 Mini quiz due one hour before class

Recitations:

22 – 27 September

Assignment (complete after class, due by one hour before the start of next class):

Class 3 Assignment

Class 4: Policy interventions: taxes and subsidies

What happens when policy interventions interfere with supply or demand? Tax incidence, deadweight loss and efficiency.

Lectures:

28 September

- Class 3 Assignment due one hour before class
- Class 4 Mini quiz due one hour before class

Recitations:

29 September - 4 October

Assignment (complete after class, due by one hour before the start of next class):

Class 4 Assignment

Class 5: Production: framing decisions, costs, profits, competitive markets and supply

Decisions made by organizations that result in the supply of goods and services; implicit costs, opportunity costs and economic profit; production functions, cost functions; short-run versus long-run; profit maximization and output decisions of competitive firms.

Lectures:

5 October

- Class 4 Assignment due one hour before class
- Class 5 Mini quiz due one hour before class

Recitations:

6 –11 October

*Note that there are no classes on Monday 10th October (Fall Break) and the Monday recitations will be held on Tuesday 11th October (Legislative Monday). Students in the Tuesday recitations may attend any other recitation or watch recordings of recitations this week.

Assignment (complete after class, due by one hour before the start of next class):

Class 5 Assignment

Class 6: Production (continued); International trade and tariffs

Market dynamics in the long run. International trade and tariffs. Review of economic applications.

Lectures:

12 October

- Class 5 Assignment due one hour before class
- Class 6 Mini quiz due one hour before class

Recitations:

13 - 18 October

Class 7: Midterm examination (covers weeks 1-6)

All exams are online. Note that class time is extended to two hours for the exam and some sections begin earlier than their usual lecture time.

Dates:

19 October

- Section 01: 10:00am-12:00pm, online, Ingrid Gould Ellen
- Section 02: 2:00-4:00pm, online, Sewin Chan
- Section 03: 4:30-6:30pm, online, Erica Dixon
- Section 04: 4:30-6:30pm, online, Sewin Chan
- Section 05: 6:45-8:45pm, **online**, Erica Dixon

No recitations this week, 20 - 25 October.

Class 8: Consumer choice and decision-making

Rational decision-making for price-taking consumers; budget constraints, utility; income and substitution effects. Behavioral economics and choice architecture.

Lectures:

26 October

Class 8 Mini quiz due one hour before class

Recitations:

27 October – 1 November

Assignment (complete after class, due by one hour before the start of next class):

Class 8 Assignment

Class 9: Labor markets

Labor market demand and supply; marginal productivity; human capital theory; compensating differentials; labor market discrimination.

Lectures:

2 November

- Class 8 Assignment due one hour before class
- · Class 9 Mini quiz due one hour before class

Recitations:

3 - 8 November

Assignment (complete after class, due by one hour before the start of next class):

Class 9 Assignment

Class 10: Imperfect competition

Long run costs and returns to scale. Overview of market structures; monopoly; price discrimination; oligopoly.

Lectures:

9 November

- Class 9 Assignment due one hour before class
- Class 10 Mini quiz due one hour before class

Recitations:

10 – 15 November

Assignment (complete after class, due by one hour before the start of next class):

· Class 10 Assignment

Class 11: Game Theory and Strategic Behavior

Decision-making with interdependency, game theory, payoff matrices, decision trees. Auctions.

Lectures:

16 November

- Class 10 Assignment due one hour before class
- Class 11 Mini quiz due one hour before class

Recitations:

17 – 22 November

*Note that there will be no recitations 24-29 November due to the Thanksgiving break.

Assignment (complete after class, due by one hour before the start of next class):

Class 11 Assignment

Class 12: Asymmetric information and incentives

Asymmetric information; moral hazard and adverse selection in insurance markets and the workplace; principal-agent problems and incentives.

Lectures:

30 November

- Class 11 Assignment due one hour before class
- · Class 12 Mini quiz due one hour before class

Recitations:

1 - 6 December

Assignment (complete after class, due by one hour before the start of next class):

Class 12 Assignment

Class 13: Externalities

Positive and negative externalities; remedies involving market incentives; role of property rights.

Lectures:

7 December

- Class 12 Assignment due one hour before class
- Class 13 Mini quiz due one hour before class

Recitations:

8 – 13 December

Assignment (complete after class, due by one hour before the start of next class):

Class 13 Assignment

Class 14: Public goods; Review of economic applications

Public goods and common resources. Review of market failures and the role of public policy. Review of key lessons from the course.

Lectures:

14 December

- Class 13 Assignment due one hour before class
- · Class 14 Mini quiz due one hour before class

Recitations:

15 – 20 December

Class 15: Final examination (covers weeks 1-14)

All exams are online. Note that class time is extended to two hours for the exam and some sections begin earlier than their usual lecture time.

Dates:

21 December

- Section 01: 10:00am-12:00pm, online, Ingrid Gould Ellen
- Section 02: 2:00-4:00pm, online, Sewin Chan
- Section 03: 4:30-6:30pm, online, Erica Dixon
- Section 04: 4:30-6:30pm, online, Sewin Chan
- Section 05: 6:45-8:45pm, online, Erica Dixon

Grading Criteria

Grades will be assigned according to the following criteria:

A Excellent: Exceptional work for a graduate student. Work at this level is unusually thorough, well-reasoned, creative, methodologically sophisticated, and well written. Work is of exceptional, professional quality.

A- Very Good: Very strong work for a graduate student. Work at this level shows signs of creativity, is thorough and well-reasoned, indicates strong understanding of appropriate methodological or analytical approaches, and meets professional standards.

B+ Good: Sound work for a graduate student; well-reasoned and thorough, methodologically sound. This is the graduate student grade that indicates the student has fully accomplished the basic objectives of the course.

B Adequate: Competent work for a graduate student even though some weaknesses are evident. Demonstrates competency in the key course objectives but shows some indication that understanding of some important issues is less than complete. Methodological or analytical approaches used are adequate but student has not been thorough or has shown other weaknesses or limitations.

B- Borderline: Weak work for a graduate student; meets the minimal expectations for a graduate student in the course. Understanding of salient issues is somewhat incomplete. Methodological or analytical work performed in the course is minimally adequate. Overall performance, if consistent in graduate courses, would not suffice to sustain graduate status in "good standing."

C/-/+ Deficient: Inadequate work for a graduate student; does not meet the minimal expectations for a graduate student in the course. Work is inadequately developed or flawed by numerous errors and misunderstanding of important issues. Methodological or analytical work performed is weak and fails to demonstrate knowledge or technical competence expected of graduate students.

F Fail: Work fails to meet even minimal expectations for course credit for a graduate student. Performance has been consistently weak in methodology and understanding, with serious limits in many areas. Weaknesses or limits are pervasive.